

Work Order ID 71373

Thursday, June 30, 2011 10:23:00 AM



Page 1

Item ID:	D2573	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Saddle, Aft Out 205					
Start Date:	6/30/2011	Start Qty:	12.00		Cust Item ID:	
Required Date:	7/15/2011	Req'd Qty:	12.00		Customer:	
Reference:						

Approvals:	Process Plan:		Date:	7-6-20	Tooling:		Date:		Run	Start	
	QC:		Date:		SPC (Y/N):		Date:			Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
D2573	Rev E								

100		0.00							
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	HAAS CNC VERTICAL MACHINING #1								
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	Program Batch No. 71373 Double check by: 7/10/12					12			
	1 per Folio FA051 and inspect per attached Dimension Sheets 2-Machine Step								
	No 2 per Folio FA051 and inspect per attached Dimension Sheets 3-Machine								
	Step No 3 per Folio FA051 and insp								

110		0.00							
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	CONVENTIONAL MILLING MACHINE								
Mill Conv	Memo	0.00							
Conventional Milling Machine	Machine keyway as per dwg D2573 & D2574					12			

120		0.00							
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	QC2- Inspect parts off machine FAI/FAIB								
QC	Memo	0.00							
Quality Control						12			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			



NOTE: Date & initial all entries



Work Order ID 71373




Thursday, June 30, 2011 10:23:00 AM



Page 2

Item ID: D2573 Accept  Setup Start 
Revision ID: Stop 
Item Name: Saddle, Aft Out 205
Start Date: 6/30/2011 Start Qty: 12.00  Cust Item ID:
Required Date: 7/15/2011 Req'd Qty: 12.00  Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start 
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130  QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00		S.A 11/07/18		12	0		
140  HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				12	0		11/07/18
150  Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum M 117745 Memo START TIME: 11:00 300° FINISH TIME: 11:00	0.00 0.00				12	0		11-7-19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 71373

Thursday, June 30, 2011 10:23:00 AM



Page 3

Item ID: D2573

Accept



Setup Start



Revision ID:

Stop



Item Name: Saddle, Aft Out 205

Start Date: 6/30/2011 Start Qty: 12.00



Cust Item ID:

Required Date: 7/15/2011 Req'd Qty: 12.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				12	0	11/07/19	
170 Packaging Packaging	Identify as per dwg & Stock Location: <u>409</u> Memo	0.00 0.00						11/7/15	(12)
180 QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00						11/7/20	MF 11-07-19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, June 30, 2011 10:23:07 AM

Page 1

Work Order ID: 71373



Parent Item: D2573



Parent Item Name: Saddle, Aft Out 205


Start Date: 6/30/2011

Required Date: 7/15/2011

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP: 1 As Per RevE 06-01-27 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-007  Saddle Billet		Manufactured	No			100	Each	25.0000	1	12			

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MAT042	3	
66967	3	
MAT045	22	
65383	13	
65954	1	
70678	8	

12
amk 11/07/12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	71373
Description: Saddle, Aft Outboard	Part Number:	D2573
Inspection Dwg: D2573 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

				Recorded Actual Dimensions				By	Date
Dim	Min	Max	Go/No Go Gauge	1	2	3	4		
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.750	1.749	1.749	1.750		
C	3.495	3.505		3.500	3.499	3.499	3.500		
D	1.745	1.755		1.750	1.749	1.749	1.750		
E	7.990	8.010		8.004	8.003	8.005	8.004		
F	0.490	0.510		.502	.501	.502	.502		
G	0.257	0.262		.259	.259	.259	.259		
H	0.375	0.380		.377	.377	.377	.377		
I	0.490	0.510		.501	.501	.503	.503		
J	1.174	1.184		1.178	1.178	1.178	1.178		
K	0.558	0.578		.567	.568	.570	.570		
L	1.174	1.184		1.178	1.178	1.178	1.178		
M	1.365	1.375		1.368	1.368	1.368	1.368		
N	2.495	2.505		2.499	2.500	2.500	2.499		
O	4.119	4.129		4.123	4.123	4.123	4.123		
P	0.115	0.135		.124	.123	.123	.123		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.257	.257	.257	.257		
S	0.115	0.135		.128	.127	.129	.127		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.230	3.230	3.230	3.228		
V	0.230	0.250		.240	.239	.240	.240		
W	0.115	0.135		.130	.130	.130	.130		
X	0.308	0.313		.310	.309	.310	.310		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.362	.362	.362	.363		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.626	.627	.627	.627		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.247	.247	.245	.247		
AE	1.500	1.520		1.510	1.510	1.510	1.510		
AF	0.115	0.135		.131	.131	.130	.129		
AG	0.240	0.280		.277	.271	.272	.278		
AH	0.240	0.260		.250	.249	.250	.250		
AI	2.000	2.020		2.000	2.000	2.000	2.000		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	SM
Date:	11/07/12

Audited by:	B.A
Date:	11/07/12

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

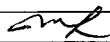
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

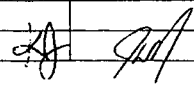
DART AEROSPACE LTD		Work Order: 71573
Description: Saddle, Aft Outboard		Part Number: D2573
Inspection Dwg: D2573 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	A5	A6	A7	A8	By	Date
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.749	1.750	1.750	1.749		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.749	1.750	1.750	1.749		
E	7.990	8.010		8.003	8.004	8.004	8.004		
F	0.490	0.510		.502	.502	.502	.502		
G	0.257	0.262		.259	.259	.259	.259		
H	0.375	0.380		.377	.377	.377	.377		
I	0.490	0.510		.503	.503	.503	.503		
J	1.174	1.184		1.178	1.178	1.178	1.178		
K	0.558	0.578		.568	.569	.570	.570		
L	1.174	1.184		1.178	1.178	1.178	1.178		
M	1.365	1.375		1.368	1.368	1.368	1.368		
N	2.495	2.505		2.499	2.500	2.500	2.500		
O	4.119	4.129		4.123	4.123	4.123	4.123		
P	0.115	0.135		.123	.124	.123	.124		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.257	.257	.253	.257		
S	0.115	0.135		.127	.127	.128	.128		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.229	3.229	3.228	3.229		
V	0.230	0.250		.241	.239	.239	.241		
W	0.115	0.135		.131	.130	.129	.130		
X	0.308	0.313		.310	.308	.310	.310		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.363	.365	.365	.364		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.626	.627	.627	.626		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.247	.247	.246	.247		
AE	1.500	1.520		1.509	1.510	1.513	1.510		
AF	0.115	0.135		.130	.130	.130	.130		
AG	0.240	0.280		.272	.272	.275	.270		
AH	0.240	0.260		.257	.249	.249	.250		
AI	2.000	2.020		2.000	2.001	2.003	2.000		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by: 
Date: 11/07/14

Audited by: B.A
Date: 11/07/18

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

DART AEROSPACE LTD	Work Order:	71373
Description: Saddle, Aft Outboard	Part Number:	D2573
Inspection Dwg: D2573 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1/8	2/10	3/11	1/12	By	Date
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.004	8.003	8.003	8.003		
F	0.490	0.510		.502	.502	.502	.502		
G	0.257	0.262		.259	.259	.259	.259		
H	0.375	0.380		.377	.377	.377	.377		
I	0.490	0.510		.502	.503	.503	.503		
J	1.174	1.184		1.178	1.178	1.178	1.178		
K	0.558	0.578		.569	.570	.570	.570		
L	1.174	1.184		1.178	1.178	1.178	1.178		
M	1.365	1.375		1.368	1.368	1.368	1.369		
N	2.495	2.505		2.500	2.499	2.500	2.500		
O	4.119	4.129		4.123	4.122	4.123	4.123		
P	0.115	0.135		.123	.123	.124	.124		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.257	.257	.253	.252		
S	0.115	0.135		.126	.128	.126	.127		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.230	3.229	3.228	3.230		
V	0.230	0.250		.240	.240	.240	.240		
W	0.115	0.135		.129	.130	.130	.130		
X	0.308	0.313		.310	.310	.309	.309		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.363	.362	.364	.364		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.626	.627	.627	.626		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.246	.246	.247	.246		
AE	1.500	1.520		1.509	1.510	1.512	1.510		
AF	0.115	0.135		.130	.130	.130	.130		
AG	0.240	0.280		.270	.270	.270	.270		
AH	0.240	0.260		.250	.250	.250	.250		
AI	2.000	2.020		2.000	2.000	2.002	2.000		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	<i>[Signature]</i>
Date:	11/07/14

Audited by:	A.A
Date:	11/07/18

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	<i>[Signature]</i>

MATERIAL: 7075-T7351 (Q0-A-250/12)
(REF DART SPEC. D6102-001)
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER
DART QSI 005 4.3
BREAK ALL SHARP EDGES 0.010 TO 0.020
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

05.12.06 TT

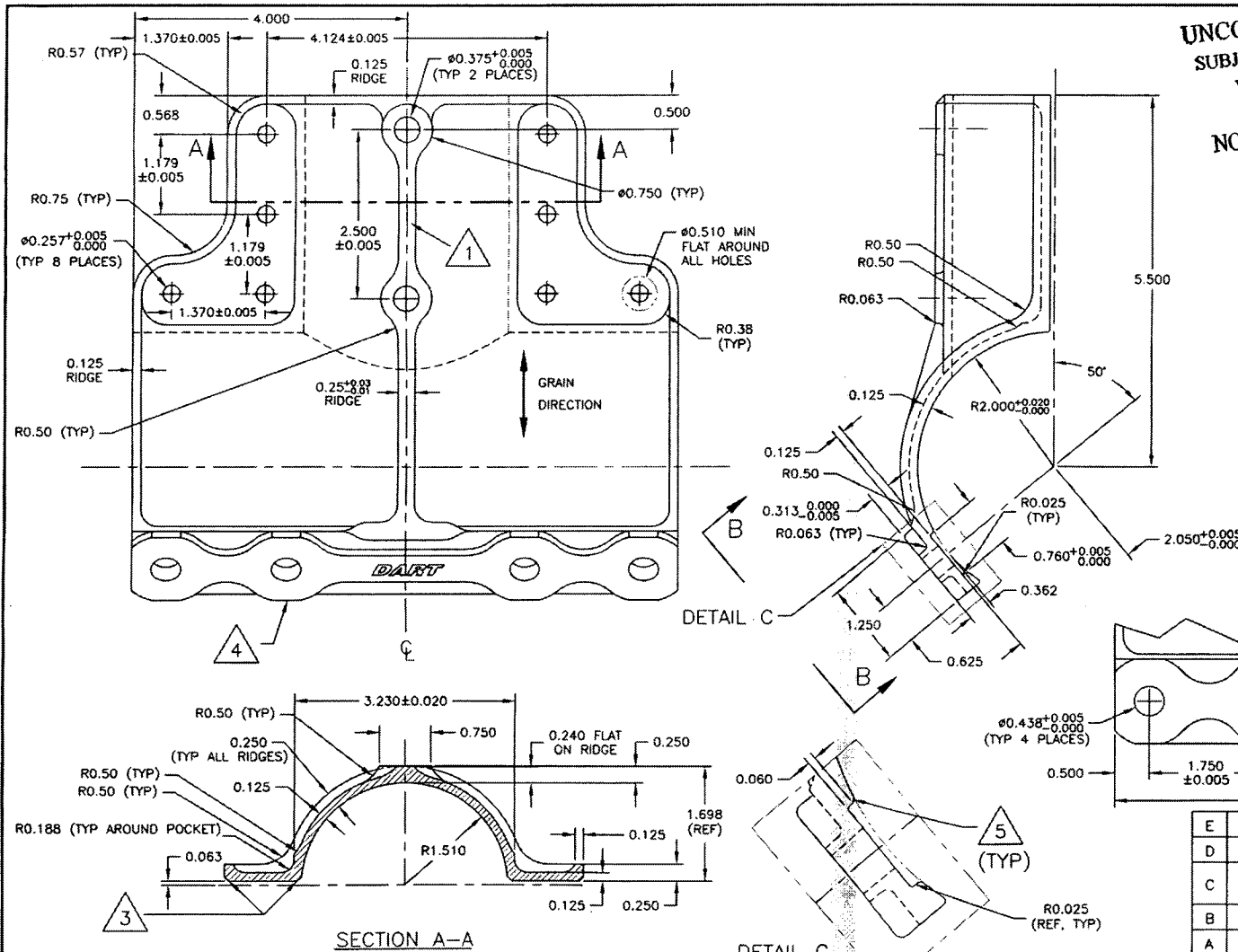
MATERIAL: 7075-T7351 (Q0-A-250/12)
(REF DART SPEC. D6102-001)
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER
DART QSI 005 4.3
BREAK ALL SHARP EDGES 0.010 TO 0.020
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- | | |
|---|--|
| 1 | ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010 |
| 2 | ENGRAVE DART LOGO TO MAX DEPTH OF 0.015 WITH MIN RAD 0.125 |
| 3 | CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES) |
| 4 | CHAMFER 0.063" x 45° ALL AROUND |
| 5 | CHAMFER 0.033" x 45° (SEE DETAIL C) |

E	05.07.13	ADD CHAMFER ON RIDGE NOTE 5
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCRP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE

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OR COPIED OR COMMUNICATED TO ANY OTHER
PERSON WITHOUT WRITTEN PERMISSION FROM
DART AEROSPACE LTD.

DESIGN	DRAWN BY	 DART AEROSPACE LTD. MARKHAM, ONTARIO, CANADA	
DS	PH	DRAWING NO.	REV. E
CHECKED 	APPROVED 	D2573	SHEET 1 OF 1
DATE	TITLE		SCALE
05.07.13	OUTER AFT SADDLE		2:1



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries